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LABORATORY REPORT

October 15, 2013

Tim Pool
SCS Aquaterra
13 Executive Dr., Suite 1
Fairview Heights, IL 62208

RE: CWH Flare Gas Sample / 27213733.12

Dear Tim:

Enclosed are the results of the samples submitted to our laboratory on October 1, 2013. For your reference, these analyses have been assigned our service request number P1304361.

All analyses were performed according to our laboratory's NELAP and DoD-ELAP-approved quality assurance program. The test results meet requirements of the current NELAP and DoD-ELAP standards, where applicable, and except as noted in the laboratory case narrative provided. For a specific list of NELAP and DoD-ELAP-accredited analytes, refer to the certifications section at www.alsglobal.com. Results are intended to be considered in their entirety and apply only to the samples analyzed and reported herein.

If you have any questions, please call me at (805) 526-7161.

Respectfully submitted,

ALS | Environmental

By Sue Anderson at 9:20 am, Oct 15, 2013

Sue Anderson
Project Manager

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Client: SCS Aquaterra
Project: CWH Flare Gas Sample / 27213733.12

Service Request No: P1304361

CASE NARRATIVE

The samples were received intact under chain of custody on October 1, 2013 and were stored in accordance with the analytical method requirements. Please refer to the sample acceptance check form for additional information. The results reported herein are applicable only to the condition of the samples at the time of sample receipt.

BTU and CHONS Analysis

The results for BTU and CHONS were generated according to ASTM D 3588-98. The following analyses were performed and used to calculate the BTU and CHONS results. This method is not included on the laboratory's NELAP, DoD-ELAP, or AIHA-LAP scope of accreditation.

C2 through C6 Hydrocarbon Analysis

The samples were analyzed according to modified EPA Method TO-3 for C2 through >C6 hydrocarbons using a gas chromatograph equipped with a flame ionization detector (FID). This method is not included on the laboratory's NELAP or AIHA-LAP scope of accreditation.

Fixed Gases Analysis

The samples were also analyzed for fixed gases (hydrogen, oxygen/argon, nitrogen, carbon monoxide, methane and carbon dioxide) according to modified EPA Method 3C (single injection) using a gas chromatograph equipped with a thermal conductivity detector (TCD). This method is not included on the laboratory's NELAP or AIHA-LAP scope of accreditation.

Hydrogen Sulfide Analysis

The samples were also analyzed for hydrogen sulfide per ASTM D 5504-08 using a gas chromatograph equipped with a sulfur chemiluminescence detector (SCD). This method is not included on the laboratory's NELAP, DoD-ELAP, or AIHA-LAP scope of accreditation.

Total Gaseous Non-Methane Organics as Methane Analysis

The samples were also analyzed for total gaseous non-methane organics as methane according to modified EPA Method 25C. The analyses included a single sample injection (method modification) analyzed by gas chromatography using flame ionization detection/total combustion analysis.

The results of analyses are given in the attached laboratory report. All results are intended to be considered in their entirety, and ALS Environmental (ALS) is not responsible for utilization of less than the complete report.

Use of ALS Environmental (ALS)'s Name. Client shall not use ALS's name or trademark in any marketing or reporting materials, press releases or in any other manner ("Materials") whatsoever and shall not attribute to ALS any test result, tolerance or specification derived from ALS's data ("Attribution") without ALS's prior written consent, which may be withheld by ALS for any reason in its sole discretion. To request ALS's consent, Client shall provide copies of the proposed Materials or Attribution and describe in writing Client's proposed use of such Materials or Attribution. If ALS has not provided written approval of the Materials or Attribution within ten (10) days of receipt from Client, Client's request to use ALS's name or trademark in any Materials or Attribution shall be deemed denied. ALS may, in its discretion, reasonably charge Client for its time in reviewing Materials or Attribution requests. Client acknowledges and agrees that the unauthorized use of ALS's name or trademark may cause ALS to incur irreparable harm for which the recovery of money damages will be inadequate. Accordingly, Client acknowledges and agrees that a violation shall justify preliminary injunctive relief. For questions contact the laboratory.

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ALS Environmental – Simi Valley

Certifications, Accreditations, and Registrations

Agency	Web Site	Number
AIHA	http://www.aihaaccreditedlabs.org	101661
Arizona DHS	http://www.azdhs.gov/lab/license/env.htm	AZ0694
DoD ELAP	http://www.pjilabs.com/search-accredited-labs	L11-203
Florida DOH (NELAP)	http://www.doh.state.fl.us/lab/EnvLabCert/WaterCert.htm	E871020
Maine DHHS	http://www.maine.gov/dhhs/mecdc/environmental-health/water/dwp-services/labcert/labcert.htm	2012039
Minnesota DOH (NELAP)	http://www.health.state.mn.us/accreditation	581572
New Jersey DEP (NELAP)	http://www.nj.gov/dep/oqa/	CA009
New York DOH (NELAP)	http://www.wadsworth.org/labcert/elap/elap.html	11221
Oregon PHD (NELAP)	http://public.health.oregon.gov/LaboratoryServices/EnvironmentalLaboratoryAccreditation/Pages/index.aspx	CA200007
Pennsylvania DEP	http://www.depweb.state.pa.us/labs	68-03307 (Registration)
Texas CEQ (NELAP)	http://www.tceq.texas.gov/field/qa/env_lab_accreditation.html	T104704413-13-4
Utah DOH (NELAP)	http://www.health.utah.gov/lab/labimp/certification/index.html	CA016272013-3
Washington DOE	http://www.ecy.wa.gov/programs/eap/labs/lab-accreditation.html	C946

Analyses were performed according to our laboratory's NELAP and DoD-ELAP approved quality assurance program. A complete listing of specific NELAP and DoD-ELAP certified analytes can be found in the certifications section at www.alsglobal.com, or at the accreditation body's website.

Each of the certifications listed above have an explicit Scope of Accreditation that applies to specific matrices/methods/analytes; therefore, please contact the laboratory for information corresponding to a particular certification.

ALS ENVIRONMENTAL

DETAIL SUMMARY REPORT

Client: SCS Aquaterra
Project ID: CWH Flare Gas Sample / 27213733.12

Service Request: P1304361

Date Received: 10/1/2013
Time Received: 09:00

Client Sample ID	Lab Code	Matrix	Date Collected	Time Collected	Container ID	Pi1 (psig)	Pfi (psig)				
								TO-3 Modified - C1C6+ Can	3C Modified - Fxd Gases Can	ASTM D5504-01 - H2S Can	25C Modified - TGNMO+ IX Can
CW4	P1304361-001	Air	9/26/2013	15:04	ISC01160	-1.18	7.27	X	X	X	X
CW5	P1304361-002	Air	9/26/2013	15:23	ISC01023	-2.25	5.26	X	X	X	X
CW6	P1304361-003	Air	9/26/2013	15:36	ISC00392	-1.04	6.54	X	X	X	X



Page _____ of _____

[illegible]

WM01048

ALS Environmental
Sample Acceptance Check Form

Client: SCS Aquaterra

Work order: P1304361

Project: CWH Flare Gas Sample / 27213733.12

Sample(s) received on: 10/1/13

Date opened: 10/1/13

by: RMARTENIES

Note: This form is used for all samples received by ALS. The use of this form for custody seals is strictly meant to indicate presence/absence and not as an indication of compliance or nonconformity. Thermal preservation and pH will only be evaluated either at the request of the client and/or as required by the method/SOP.

	Yes	No	N/A
1 Were sample containers properly marked with client sample ID?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2 Container(s) supplied by ALS ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3 Did sample containers arrive in good condition?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4 Were chain-of-custody papers used and filled out?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5 Did sample container labels and/or tags agree with custody papers?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6 Was sample volume received adequate for analysis?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7 Are samples within specified holding times?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8 Was proper temperature (thermal preservation) of cooler at receipt adhered to?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
9 Was a trip blank received?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
10 Were custody seals on outside of cooler/Box?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Location of seal(s)? _____ Sealing Lid?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Were signature and date included?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Were seals intact?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Were custody seals on outside of sample container?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Location of seal(s)? _____ Sealing Lid?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Were signature and date included?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Were seals intact?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
11 Do containers have appropriate preservation , according to method/SOP or Client specified information?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Is there a client indication that the submitted samples are pH preserved?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Were VOA vials checked for presence/absence of air bubbles?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Does the client/method/SOP require that the analyst check the sample pH and <u>if necessary</u> alter it?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
12 Tubes: Are the tubes capped and intact?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Do they contain moisture?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
13 Badges: Are the badges properly capped and intact?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Are dual bed badges separated and individually capped and intact?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Lab Sample ID	Container Description	Required pH *	Received pH	Adjusted pH	VOA Headspace (Presence/Absence)	Receipt / Preservation Comments
P1304361-001.01	1.0 L Source Can					
P1304361-002.01	1.0 L Source Can					
P1304361-003.01	1.0 L Source Can					

Explain any discrepancies: (include lab sample ID numbers): _____

RSK - MEEPP, HCL (pH<2); RSK - CO2, (pH 5-8); Sulfur (pH>4)

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

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Client: SCS Aquaterra
Client Sample ID: CW4
Client Project ID: CWH Flare Gas Sample / 27213733.12

ALS Project ID: P1304361
 ALS Sample ID: P1304361-001

Test Code: ASTM D3588-98
 Analyst: Mike Conejo/Jennifer Young
 Sample Type: 1.0 L Summa Canister
 Test Notes:
 Container ID: 1SC01160

Date Collected: 9/26/13
 Date Received: 10/1/13

Initial Pressure (psig): -1.18 Final Pressure (psig): 7.27

Canister Dilution Factor: 1.63

Components	Result Volume %	Result Weight %	Data Qualifier
Hydrogen	0.82	0.06	
Oxygen + Argon	1.22	1.42	
Nitrogen	7.47	7.64	
Carbon Monoxide	< 0.01	< 0.01	
Methane	53.42	31.25	
Carbon Dioxide	36.96	59.32	
Hydrogen Sulfide	< 0.01	< 0.01	
C2 as Ethane	< 0.01	< 0.01	
C3 as Propane	< 0.01	0.01	
C4 as n-Butane	< 0.01	0.01	
C5 as n-Pentane	0.01	0.04	
C6 as n-Hexane	0.01	0.04	
> C6 as n-Hexane	0.04	0.18	
TOTALS	99.99	99.99	

Components	Mole %	Weight %
Carbon	22.77	39.79
Hydrogen	54.33	7.97
Oxygen + Argon	19.15	44.59
Nitrogen	3.75	7.64
Sulfur	< 0.10	< 0.10

Specific Gravity (Air = 1)		0.9467
Specific Volume	ft3/lb	13.84
Gross Heating Value (Dry Gas @ 60 F, 14.696 psia)	BTU/ft3	548.2
Net Heating Value (Dry Gas @ 60 F, 14.696 psia)	BTU/ft3	493.5
Gross Heating Value (Water Saturated at 0.25636 psia)	BTU/ft3	537.1
Net Heating Value (Water Saturated at 0.25636 psia)	BTU/ft3	483.5
Gross Heating Value (Dry Gas @ 60 F, 14.696 psia)	BTU/lb	7,587.2
Net Heating Value (Dry Gas @ 60 F, 14.696 psia)	BTU/lb	6,831.0
Compressibility Factor "Z" (60 F, 14.696 psia)		0.9971

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

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Client: SCS Aquaterra
Client Sample ID: CW5
Client Project ID: CWH Flare Gas Sample / 27213733.12

ALS Project ID: P1304361
ALS Sample ID: P1304361-002

Test Code: ASTM D3588-98
Analyst: Mike Conejo/Jennifer Young
Sample Type: 1.0 L Summa Canister
Test Notes:
Container ID: 1SC01023

Date Collected: 9/26/13
Date Received: 10/1/13

Initial Pressure (psig): -2.25 Final Pressure (psig): 5.26

Canister Dilution Factor: 1.60

Components	Result Volume %	Result Weight %	Data Qualifier
Hydrogen	0.83	0.06	
Oxygen + Argon	1.14	1.33	
Nitrogen	7.22	7.38	
Carbon Monoxide	< 0.01	< 0.01	
Methane	53.58	31.34	
Carbon Dioxide	37.12	59.57	
Hydrogen Sulfide	< 0.01	< 0.01	
C2 as Ethane	< 0.01	< 0.01	
C3 as Propane	< 0.01	0.01	
C4 as n-Butane	< 0.01	0.01	
C5 as n-Pentane	0.02	0.04	
C6 as n-Hexane	0.02	0.05	
> C6 as n-Hexane	0.05	0.19	
TOTALS	99.99	99.99	

Components	Mole %	Weight %
Carbon	22.81	39.94
Hydrogen	54.41	7.99
Oxygen + Argon	19.16	44.67
Nitrogen	3.62	7.38
Sulfur	< 0.10	< 0.10

Specific Gravity (Air = 1)		0.9469
Specific Volume	ft ³ /lb	13.84
Gross Heating Value (Dry Gas @ 60 F, 14.696 psia)	BTU/ft ³	550.1
Net Heating Value (Dry Gas @ 60 F, 14.696 psia)	BTU/ft ³	495.3
Gross Heating Value (Water Saturated at 0.25636 psia)	BTU/ft ³	538.9
Net Heating Value (Water Saturated at 0.25636 psia)	BTU/ft ³	485.2
Gross Heating Value (Dry Gas @ 60 F, 14.696 psia)	BTU/lb	7,612.2
Net Heating Value (Dry Gas @ 60 F, 14.696 psia)	BTU/lb	6,853.6
Compressibility Factor "Z" (60 F, 14.696 psia)		0.9971

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

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Client: SCS Aquaterra
Client Sample ID: CW6
Client Project ID: CWH Flare Gas Sample / 27213733.12

ALS Project ID: P1304361
ALS Sample ID: P1304361-003

Test Code: ASTM D3588-98
Analyst: Mike Conejo/Jennifer Young
Sample Type: 1.0 L Summa Canister
Test Notes:
Container ID: 1SC00392

Date Collected: 9/26/13
Date Received: 10/1/13

Initial Pressure (psig): -1.04 Final Pressure (psig): 6.54

Canister Dilution Factor: 1.55

Components	Result Volume %	Result Weight %	Data Qualifier
Hydrogen	0.84	0.06	
Oxygen + Argon	1.03	1.21	
Nitrogen	6.92	7.06	
Carbon Monoxide	< 0.01	< 0.01	
Methane	53.81	31.48	
Carbon Dioxide	37.30	59.87	
Hydrogen Sulfide	< 0.01	< 0.01	
C2 as Ethane	< 0.01	< 0.01	
C3 as Propane	< 0.01	0.01	
C4 as n-Butane	< 0.01	0.01	
C5 as n-Pentane	0.02	0.04	
C6 as n-Hexane	0.02	0.05	
> C6 as n-Hexane	0.05	0.20	
TOTALS	99.99	99.99	

Components	Mole %	Weight %
Carbon	22.87	40.13
Hydrogen	54.53	8.03
Oxygen + Argon	19.15	44.77
Nitrogen	3.46	7.07
Sulfur	< 0.10	< 0.10

Specific Gravity (Air = 1)		0.9467
Specific Volume	ft3/lb	13.84
Gross Heating Value (Dry Gas @ 60 F, 14.696 psia)	BTU/ft3	552.5
Net Heating Value (Dry Gas @ 60 F, 14.696 psia)	BTU/ft3	497.5
Gross Heating Value (Water Saturated at 0.25636 psia)	BTU/ft3	541.3
Net Heating Value (Water Saturated at 0.25636 psia)	BTU/ft3	487.4
Gross Heating Value (Dry Gas @ 60 F, 14.696 psia)	BTU/lb	7,647.1
Net Heating Value (Dry Gas @ 60 F, 14.696 psia)	BTU/lb	6,885.0
Compressibility Factor "Z" (60 F, 14.696 psia)		0.9971

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

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Client: SCS Aquaterra
Client Sample ID: CW4
Client Project ID: CWH Flare Gas Sample / 27213733.12

ALS Project ID: P1304361
 ALS Sample ID: P1304361-001

Test Code: EPA Method 3C Modified
 Instrument ID: HP5890 II/GC1/TCD
 Analyst: Jennifer Young
 Sample Type: 1.0 L Summa Canister
 Test Notes:
 Container ID: 1SC01160

Date Collected: 9/26/13
 Date Received: 10/1/13
 Date Analyzed: 10/4/13
 Volume(s) Analyzed: 0.10 ml(s)

Initial Pressure (psig): -1.18 Final Pressure (psig): 7.27

Canister Dilution Factor: 1.63

CAS #	Compound	Result %, v/v	MRL %, v/v	Data Qualifier
1333-74-0	Hydrogen	0.824	0.16	
7782-44-7	Oxygen +			
7440-37-1	Argon	1.22	0.16	
7727-37-9	Nitrogen	7.48	0.16	
630-08-0	Carbon Monoxide	ND	0.16	
74-82-8	Methane	53.4	0.16	
124-38-9	Carbon Dioxide	37.0	0.16	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

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RESULTS OF ANALYSIS

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Client: SCS Aquaterra
Client Sample ID: CW5
Client Project ID: CWH Flare Gas Sample / 27213733.12

ALS Project ID: P1304361
 ALS Sample ID: P1304361-002

Test Code: EPA Method 3C Modified
 Instrument ID: HP5890 II/GC1/TCD
 Analyst: Jennifer Young
 Sample Type: 1.0 L Summa Canister
 Test Notes:
 Container ID: 1SC01023

Date Collected: 9/26/13
 Date Received: 10/1/13
 Date Analyzed: 10/4/13
 Volume(s) Analyzed: 0.10 ml(s)

Initial Pressure (psig): -2.25 Final Pressure (psig): 5.26

Canister Dilution Factor: 1.60

CAS #	Compound	Result %, v/v	MRL %, v/v	Data Qualifier
1333-74-0	Hydrogen	0.828	0.16	
7782-44-7	Oxygen +			
7440-37-1	Argon	1.14	0.16	
7727-37-9	Nitrogen	7.22	0.16	
630-08-0	Carbon Monoxide	ND	0.16	
74-82-8	Methane	53.6	0.16	
124-38-9	Carbon Dioxide	37.1	0.16	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

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ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

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Client: SCS Aquaterra
Client Sample ID: CW6
Client Project ID: CWH Flare Gas Sample / 27213733.12

ALS Project ID: P1304361
 ALS Sample ID: P1304361-003

Test Code: EPA Method 3C Modified
 Instrument ID: HP5890 II/GC1/TCD
 Analyst: Jennifer Young
 Sample Type: 1.0 L Summa Canister
 Test Notes:
 Container ID: 1SC00392

Date Collected: 9/26/13
 Date Received: 10/1/13
 Date Analyzed: 10/4/13
 Volume(s) Analyzed: 0.10 ml(s)

Initial Pressure (psig): -1.04 Final Pressure (psig): 6.54

Canister Dilution Factor: 1.55

CAS #	Compound	Result %, v/v	MRL %, v/v	Data Qualifier
1333-74-0	Hydrogen	0.844	0.16	
7782-44-7	Oxygen +			
7440-37-1	Argon	1.03	0.16	
7727-37-9	Nitrogen	6.92	0.16	
630-08-0	Carbon Monoxide	ND	0.16	
74-82-8	Methane	53.8	0.16	
124-38-9	Carbon Dioxide	37.3	0.16	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

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Client: SCS Aquaterra
Client Sample ID: Method Blank
Client Project ID: CWH Flare Gas Sample / 27213733.12

ALS Project ID: P1304361
 ALS Sample ID: P131004-MB

Test Code: EPA Method 3C Modified
 Instrument ID: HP5890 II/GC1/TCD
 Analyst: Jennifer Young
 Sample Type: 1.0 L Summa Canister
 Test Notes:

Date Collected: NA
 Date Received: NA
 Date Analyzed: 10/04/13
 Volume(s) Analyzed: 0.10 ml(s)

CAS #	Compound	Result %, v/v	MRL %, v/v	Data Qualifier
1333-74-0	Hydrogen	ND	0.10	
7782-44-7	Oxygen +			
7440-37-1	Argon	ND	0.10	
7727-37-9	Nitrogen	ND	0.10	
630-08-0	Carbon Monoxide	ND	0.10	
74-82-8	Methane	ND	0.10	
124-38-9	Carbon Dioxide	ND	0.10	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

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LABORATORY CONTROL SAMPLE SUMMARY

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Client: SCS Aquaterra
Client Sample ID: Lab Control Sample
Client Project ID: CWH Flare Gas Sample / 27213733.12

ALS Project ID: P1304361
 ALS Sample ID: P131004-LCS

Test Code: EPA Method 3C Modified
 Instrument ID: HP5890 II/GC1/TCD
 Analyst: Jennifer Young
 Sample Type: 1.0 L Summa Canister
 Test Notes:

Date Collected: NA
 Date Received: NA
 Date Analyzed: 10/04/13
 Volume(s) Analyzed: NA ml(s)

CAS #	Compound	Spike Amount ppmV	Result ppmV	% Recovery	ALS Acceptance Limits	Data Qualifier
1333-74-0	Hydrogen	40,000	39,600	99	84-110	
7782-44-7	Oxygen +					
7440-37-1	Argon	50,000	52,600	105	88-114	
7727-37-9	Nitrogen	50,000	53,000	106	88-114	
630-08-0	Carbon Monoxide	50,000	52,100	104	88-113	
74-82-8	Methane	40,000	40,500	101	87-110	
124-38-9	Carbon Dioxide	50,000	50,400	101	84-109	

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RESULTS OF ANALYSIS

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Client: SCS Aquaterra
Client Project ID: CWH Flare Gas Sample / 27213733.12

ALS Project ID: P1304361

Total Gaseous Nonmethane Organics (TGNMO) as Methane

Test Code: EPA Method 25C Modified
Instrument ID: HP5890 II/GC1/FID/TCA
Analyst: Jennifer Young
Sampling Media: 1.0 L Summa Canister(s)
Test Notes:

Date(s) Collected: 9/26/13
Date Received: 10/1/13
Date Analyzed: 10/4/13

Client Sample ID	ALS Sample ID	Canister Dilution Factor	Injection Volume ml(s)	Result ppmV	MRL ppmV	Data Qualifier
CW4	P1304361-001	1.63	0.50	3,900	1.6	
CW5	P1304361-002	1.60	0.50	3,800	1.6	
CW6	P1304361-003	1.55	0.50	4,200	1.6	
Method Blank	P131004-MB	1.00	0.50	ND	1.0	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

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LABORATORY CONTROL SAMPLE SUMMARY

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Client: SCS Aquaterra
Client Sample ID: Lab Control Sample
Client Project ID: CWH Flare Gas Sample / 27213733.12

ALS Project ID: P1304361
ALS Sample ID: P131004-LCS

Test Code: EPA Method 25C Modified
Instrument ID: HP5890 II/GC1/FID/TCA
Analyst: Jennifer Young
Sampling Media: 1.0 L Summa Canister
Test Notes:

Date Collected: NA
Date Received: NA
Date Analyzed: 10/04/13
Volume(s) Analyzed: NA ml(s)

Compound	Spike Amount ppmV	Result ppmV	% Recovery	ALS	Data Qualifier
				Acceptance Limits	
Total Gaseous Nonmethane Organics (TGNMO) as Methane	99.0	101	102	85-139	